

Title (en)

Crystallized glass for information recording medium, crystallized glass substrate, and information recording medium using the crystallized glass substrate

Title (de)

Kristallisiertes Glas für Informationsaufzeichnungsmedium, kristallisiertes Glas-Substrat, und Informationsaufzeichnungsmedium unter Verwendung des kristallisierten Glas-Substrats

Title (fr)

Verre cristallisé pour support d'enregistrement optique, substrat en verre cristallisé, et support d'enregistrement optique utilisant le substrat en verre cristallisé

Publication

EP 0941973 A3 20000927 (EN)

Application

EP 99104949 A 19990312

Priority

- JP 6362398 A 19980313
- JP 6363498 A 19980313
- JP 6365398 A 19980313
- JP 9027098 A 19980402
- JP 34396498 A 19981203
- JP 34398398 A 19981203

Abstract (en)

[origin: EP0941973A2] Enclosed are crystallized glasses suitable for a substrate for an information recording medium such as a magnetic disc, optical disc, or optomagnetic disc, a substrate for information recording medium using such a crystallized glass substrate, and an information recording medium using such a substrate for information recording medium. The crystallized glasses are capable of providing a glass substrate having a high Young's modulus, as well as excellent mechanical strength, surface flatness, and heat resistance and having an excellent surface smoothness upon polishing. Glass substrate having an excellent surface smoothness using such a crystallized glass are also disclosed.

IPC 1-7

C03C 10/08

IPC 8 full level

C03C 10/00 (2006.01); **C03C 10/04** (2006.01); **C03C 10/08** (2006.01); **C03C 10/14** (2006.01); **C03C 19/00** (2006.01); **G11B 5/73** (2006.01)

CPC (source: EP US)

C03C 10/0027 (2013.01 - EP US); **C03C 10/0045** (2013.01 - EP US); **C03C 19/00** (2013.01 - EP US); **G11B 5/73921** (2019.04 - EP US);
C03C 2204/08 (2013.01 - EP US)

Citation (search report)

- [XA] US 5532194 A 19960702 - KAWASHIMA YASUYUKI [JP], et al & JP H07291660 A 19951107 - OHARA KK
- [PA] EP 0858974 A1 19980819 - HOYA CORP [JP] & WO 9809922 A1 19980312 - HOYA CORP [JP]
- [A] US 5476821 A 19951219 - BEALL GEORGE H [US], et al & JP H0977531 A 19970325 - CORNING INC
- [X] US 5491116 A 19960213 - BEALL GEORGE H [US], et al
- [PX] WO 9822405 A1 19980528 - CORNING INC [US], et al
- [E] EP 0939395 A1 19990901 - OHARA KK [JP]
- [X] GB 940403 A 19631030 - CORNING GLASS WORKS
- [X] DE 2812859 A1 19791004 - TECHNISCHES GLAS VEB K
- [X] JP H0421543 A 19920124 - HOYA CORP
- [X] EP 0289943 A1 19881109 - ASAHI GLASS CO LTD [JP]
- [A] JP H07247138 A 19950926 - OHARA KK
- [A] JP S59137341 A 19840807 - NGK SPARK PLUG CO
- [X] JP H0753238 A 19950228 - TOKUYAMA CORP
- [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 606 (C - 1128) 8 November 1993 (1993-11-08)

Cited by

CN112939469A; EP1057794A1; CN1125789C; CN108640526A; DE10346197A1; DE10346197B4; JP2022514733A; DE10103085A1; DE10103085C2; CN112919810A; US2021355021A1; US11905208B2; US7037352B2; US7300896B2; WO02059053A1; WO0248279A1; US6429160B1; US6503857B2; WO2004031089A1; US7291571B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0941973 A2 19990915; EP 0941973 A3 20000927; EP 0941973 B1 20051130; DE 69928589 D1 20060105; DE 69928589 T2 20060622;
DE 69940130 D1 20090129; EP 1577275 A2 20050921; EP 1577275 A3 20051214; EP 1577275 B1 20081217; EP 2011770 A2 20090107;
EP 2011770 A3 20090318; US 2002028740 A1 20020307; US 2003171201 A1 20030911; US 2004241455 A1 20041202;
US 6294490 B1 20010925; US 6569792 B2 20030527; US 6774072 B2 20040810; US 6960399 B2 20051101

DOCDB simple family (application)

EP 99104949 A 19990312; DE 69928589 T 19990312; DE 69940130 T 19990312; EP 05013441 A 19990312; EP 08165769 A 19990312;
US 26675399 A 19990312; US 37210903 A 20030225; US 87313004 A 20040623; US 91256201 A 20010726